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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,788	05/22/2001	Shawn R. Gettemy	PALM-3653	2343

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EXAMINER

KUMAR, SRILAKSHMI K

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,788

Applicant(s)

GETTEMY, SHAWN R.

Examiner

Srilakshmi K. Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment A, August 11, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The following office action is in response to Amendment A, filed August 11, 2003. Pending claims are 1-20. Claims 1-4, 7, 8, and 10-16 have been amended.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on December 4, 2002 has been considered, but the copy of the IDS form (PTO-1449) has been misplaced. Examiner requests a copy of the IDS form (PTO-1449).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Francis et al (US 6,181,842) in view of Beatty et al. (US. 5,233,502).

As to independent claims 1, 10 and 16, Francis et al disclose a touch screen display for a personal information device (Fig. 1A), comprising; an optical touch sensor (Fig. 1A, items 18 and 19); a display; and a single piece device enclosure containing the optical touch sensor (Fig. 1A, item 10), the single piece device enclosure having a transparent surface (Fig. 1A item 10F) for viewing the display disposed beneath the transparent surface, the single piece device enclosure including a lens structure for columnating light across the transparent surface (col. 5, lines 44-col. 6, line 11), the optical touch sensor coupled to the lens structure to register contact with the transparent surface via the lens structure while the single piece device enclosure

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prevents contaminants from entering the personal information device (col. 5, line 44-col. 6, line 40); and wherein the optical sensor can be activated by touching the external surface of the single piece device enclosure to disturb light received by the lens structure (col. 5, line 44-col. 6, line 40). Where Francis et al do not explicitly show a single piece device enclosure, Beatty et al discloses a single piece touch sensitive device enclosure in Fig. 1, item 3. It would have been obvious to one of ordinary skill in the art to incorporate the single piece device enclosure of Beatty et al into that of Francis et al as the single piece enclosure is advantageous as it would be more resilient to wear and tear.

As to dependent claims 5 and 12, limitations of claims 1 and 10, and further comprising, wherein the optical touch sensor detects and registers contact from a finger on the transparent surface. Francis et al do not disclose wherein the optical sensor detects and registers contact from a finger. It would have been obvious to one of ordinary skill in the art that the system of Francis et al detects and registers contact from a finger as the system discloses a free space (10F) for user input.

As to dependent claim 2, limitations of claim 1, and further comprising, wherein the single piece device enclosure includes in mold decoration along a periphery of the single piece device enclosure (Figs. 1A & 1B).

As to dependent claim 3, limitations of claim 1, and further comprising, wherein the lens structure included within single piece device enclosure is coupled to the optical touch sensor to provide columnated light for detecting and registering contact with the transparent surface (col. 1, lines 32-36, col. 7, line 46-col. 8, line 31).

As to dependent claim 4, limitations of claim 3, and further comprising, wherein a plurality of waveguides are coupled to the lens structure and embedded within the single piece device enclosure (Fig. 1A, col. 11, lines 42-59).

As to dependent claims 6 and 13, limitations of claims 1 and 10, and further comprising, wherein the optical touch sensor detects and registers contact from a stylus on the transparent surface. Francis et al do not disclose wherein the optical sensor detects and registers contact from a stylus. It would have been obvious to one of ordinary skill in the art that the system of Francis et al detects and registers contact from a stylus as the system discloses a free space (10F) for user input.

As to dependent claim 7, limitations of claim 1, and further comprising, wherein the single piece device enclosure comprises a mylar polycarbonate material. Although Francis et al do not disclose the material with which the single piece device enclosure comprises, it would have been obvious to one of ordinary skill in the art that the device enclosure could have been made with any material.

As to dependent claim 8, limitations of claim 1, and further comprising, wherein the piece device enclosure is bezel-less (Figs. 1A and 1B).

As to dependent claims 9 and 18, limitations of claims 1 and 16, and further comprising, wherein the transparent surface transmits more than 90 percent of light impinging upon the transparent surface to the display. Francis et al do not disclose where the transparent surface transmits more than 90 percent of light. It would have been obvious to one of ordinary skill in the art that the amount transmitted could have easily been 90 percent, as Francis et al do disclose in col. 5, lines 44-67, wherein the collimation of the send light in turns enhances the collimation

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of the light beams crossing the free space region. Thus, more of the light beam is transmitted and received.

As to dependent claim 11, limitations of claim 10, and further comprising, wherein the single piece device enclosure includes a transparent surface and the display mechanism is disposed beneath the transparent surface (col. 5, line 44-col. 6, line 40).

As to dependent claim 14, limitations of claim 10, wherein the single piece device enclosure includes a periphery area for in mold decoration (Figs. 1A & 1B).

As to dependent claim 15, limitations of claim 10, and further comprising, wherein the optical lens structure is disposed along a periphery of the transparent surface of the single piece device enclosure (Fig. 1A, col. 11, lines 42-59).

As to dependent claim 17, limitations of claim 16, and further comprising, wherein a waveguide structure couples the lens structure to the optical sensor (Fig. 1A, col. 11, lines 42-59).

As to dependent claim 19, limitations of claim 16, and further comprising, wherein the bezel-less transparent surface includes peripheral area for in mold decoration (Figs. 1A and 1B).

As to dependent claim 20, limitations of claim 16, and further comprising, wherein the lens structure is embedded within the transparent surface of the display assembly (Fig. 1A, col. 11, lines 42-59).

Response to Arguments

3. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Srilakshmi K. Kumar** whose telephone number is **(703) 306 5575**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras, can be reached at (703) 305-9720.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703 305 47000377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srilakshmi K. Kumar whose telephone number is 703 306 5575. The examiner can normally be reached on 8:00 am to 4:30 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven J. Saras can be reached on 703 305 9720. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9314 for regular communications and 703 308 9051 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 4700.

Srilakshmi K. Kumar
Examiner
Art Unit 2675

SKK
November 2, 2003



STEVEN SARAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600